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ABSTRACT

The Memphis State University professional development school (PDS) model was designed to enhance teacher empowerment along certain dimensions of teacher empowerment cited in the literature: mentoring self-efficacy, teaching self-efficacy, professional knowledge, and collegiality. This PDS model contains three components: supervision of practice teachers, school improvement planning, and clinical professor training. A modified version of the "Teacher Empowerment Inventory" was administered to 140 of the 190 teachers in 6 elementary schools participating in the PDS program in 1992-1993. Data analysis indicated that teachers in the PDSs felt that the PDS experience enhanced their sense of empowerment by increasing mentoring self-efficacy (degree to which teachers feel able to influence training and entry into the profession of new teachers); teaching self-efficacy (feeling of professionalism, status, and self-esteem as teachers); collegiality (extent of teachers' belief that they work with and influence their peers to improve teaching and learning in their schools); and professional knowledge (teachers' perceptions of their own content knowledge and pedagogical skills). Although teachers perceived themselves to be more empowered along these four dimensions, findings also indicated that these teachers felt that they had very limited power to make changes that might positively affect teaching and learning within their own schools. Included in this paper is an appendix, which contains scale items and reliability estimates. (IAH)

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Teacher Empowerment in a
Professional Development School Collaborative:
Pilot Assessment

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Introduction

Background

What is empowerment? The concept *empowerment* denotes enabling, or permitting, someone to exert control over an object. Wellins, Byham, and Wilson (1991) explicate the concept of empowerment in a business context as follows:

Power means "control, authority, dominion." The prefix *em-* means "to put on to" or "to cover with." *Empowering*, then, is passing on authority and responsibility. (p. 22)

Wellins et al. (1991) also suggest specific connotations of empowerment:

As we refer to it here, empowerment occurs when power goes to employees who then experience a sense of ownership and control over their jobs. . . . Empowered individuals know that their jobs belong to them. Given a say in how things are done, employees feel more responsible. When they feel responsible, they show more initiative in their work, get more done, and enjoy the work more. (p. 22)

Whereas the concepts of teacher empowerment and employee empowerment probably share the same denotation, empowerment of teachers may have connotations other than, or in addition to, a sense of control and increased responsibility. These connotations reflect the contextual specificity of the empowerment concept when applied to the teaching profession.

Various authors have provided connotative enrichment of the empowerment concept by suggesting purposes and means or dimensions of teacher empowerment. Romanish (1991) argues that the primary purpose of empowering teachers is to improve teaching and learning experiences in the classroom. Romanish's model of an empowered teacher incorporates a

teacher's belief in his or her ability to act; this ability is tied to capable action. Not only will empowered teachers have classroom-level decision-making power, but they will also have authority to significantly influence decisions related to education at the school or system levels. Romanish's model includes a dimension of professionalism, which reflects a belief that empowered teachers participate in control of the profession and the settings in which educators function. Control of the profession may include determining who is inducted into the profession, as well as having responsibility for teacher education. Yonemura (1987) identifies three means to the empowerment of teachers: invention of curricula, fostering of peer relationships, and study that promotes shifts in perspectives about children. Being a member of a team and sharing knowledge with peers are a dimension of empowerment noted by Fay (1992). Maeroff (1988) suggests that teachers must achieve professional status, knowledge, and access to decision making to be empowered. A version of the concept of teacher empowerment that encompasses each of these authors' views would include dimensions related to collegiality with peers, influence over entrance into the profession, decision-making power, professional knowledge, and professional self-esteem.

Teacher empowerment is at the center of school reform. If schools are to make meaningful change, teachers must have significant input into what happens in classrooms and schools. In the Professional Development School (PDS), "teachers are viewed as knowledgeable and committed workers who

seek a greater voice in decisions affecting their work and who, in return, are willing to accept responsibility for these decisions" (Nystrand, 1991, p. 3). Therefore, the PDS provides a framework within which teacher empowerment can emerge. This concept of Professional Development Schools, with roots in laboratory campus and portal schools (Stallings & Kowalski, 1992), took shape as a part of the second order of educational reform in the United States during the 1980s, when both the Carnegie and the Holmes Group called for new types of schools to support the initial preparation and continuing education of teachers (Carnegie, 1986; Holmes Group, 1986).

Nystrand (1991) argues that the rationale for establishing Professional Development Schools rests on the premise that university and school personnel have shared interests in the improvement of both schools and teacher education. An individual Professional Development School may focus on the development of pre-service or in-service teachers, the induction of new teachers, or any combination of the three groups (Stallings & Kowalski, 1992). Although each Professional Development School is different, they share a common goal as noted in the definition offered by the Sid W. Richardson Foundation Forum (1993):

The Professional Development School is a school in which professors, teachers, administrators, and prospective teachers work together to build a collegial learning community. This community has as its primary goal the intellectual engagement and development of all its members--students, teachers, administrators, and future teachers. (p. 3)

The Sid W. Richardson Foundation Forum (1993) indicates that the

Professional Development School works to obtain five major objectives:

1. to develop the literacy, numeracy and reasoning skills of all students;
2. to develop the staff of the school in effective teaching and administration;
3. to prepare future teachers, administrators and teacher educators in effective teaching and leadership;
4. to engage in necessary research and reflection about learning; and
5. to serve as a model of learning, inquiry, reflection, innovation and professionalism for other schools. (p. 3)

Pursuing these five objectives requires that K-12 faculty work with their peers and university counterparts; mentor future teachers; play an active role in research and inquiry; share in the decisions made at the classroom, school, and district levels; and continue to be reflective learners. These activities are indicative of teacher empowerment that can emerge in Professional Development Schools.

Purpose of the study

The purpose of this study was to determine the extent to which Memphis State University's (MSU) Professional Development School (PDS) model influenced teachers' perceptions of their empowerment along dimensions cited in the literature as meaning teacher empowerment. The PDS model was designed to enhance teacher empowerment along the following dimensions:

1. *Mentoring Self-Efficacy*: extent to which teachers feel empowered with respect to influence on entrance into the profession and training of new teachers;
2. *Teaching Self-Efficacy*: sense of status, self-esteem, and

professionalism as teachers;

3. *Professional Knowledge*: teachers' self-perceived competencies in content knowledge and teaching skills; and

4. *Collegiality*: extent to which teachers' believe they work with and influence their peers in improving teaching and learning in their school.

Program Description

At the beginning of the 1992-93 academic year, Memphis State University, in collaboration with two local school districts, launched its Professional Development Schools program. The focus of the six participating schools is the improvement of K-12 instruction by developing, mentoring, and professionally inducting teacher education candidates and actively involving school personnel in field-based research and collaboration with Memphis State University faculty. The selection criteria for the six PDS sites were:

1. Two-thirds of the professional staff must vote to participate.
2. Faculty members will choose to be trained for their new roles as clinical professors.
3. Faculty will develop a school improvement plan.
4. Professional Development Schools will serve as models for other local system, regional, or national schools.
5. One goal of the schools will be the induction of pre-service teachers into the profession. (Chance, 1992)

Using these five criteria as a guide, the Memphis State University PDS model was designed with three major components: (a) supervision of practice teachers, (b) school improvement planning, and (c) clinical professor training. A university liaison (college professor) was assigned half-time to each PDS to

serve as a resource person in the planning, management, operation, and evaluation of each school.

Supervision of practice teachers

This component was designed to cluster the maximum feasible number of practice teachers (a.k.a. student teachers) in each PDS school. As equal partners with higher education faculty in the teacher education process, the school faculty and staff assumed the lead role in the supervision and evaluation of practice teachers. For this study, a Mentoring Self-Efficacy scale was created to solicit responses relevant to this program component.

School improvement planning

Each school developed and implemented a school improvement plan with goals relating to students, faculty, school administrators, central administrators, and parents and community. The planning process required that faculty and staff work together in developing the plan and setting priorities for training and implementation. The Teaching Self-Efficacy and Collegiality scales created for this study contain items which pertain to the school improvement planning process.

Clinical professor training

Clinical professor training needs were identified by faculty and staff through the school improvement planning process. Professionals with expertise in the identified areas provided training at the school sites. A list of the workshop topics carried out includes: stages of the student teacher, evaluation of student teachers, clinical supervision, reflective mentoring,

classroom management, grant writing, and school improvement planning. Faculty and staff members who completed the fifty-one hours of training received clinical professor certificates and were eligible for adjunct professor positions within the College of Education at MSU. Completion of the fifty-one hours was a requirement for receiving graduate credit for the training. For this study, assessment of outcomes related to clinical professor training was accomplished through administration of the Professional Knowledge and Teaching Self-Efficacy scales.

Data Collection and Analysis

Subjects

Data were collected from 140 of the 190 teachers in the six schools participating in the PDS program during the 1992-1993 school year. The total response rate was 74%.

Instrumentation

The *Teacher Empowerment Inventory* (TEI; Butler, Etheridge, James, & Ellis, 1989) was designed to measure teachers' perceptions of their empowerment in a mentoring/cooperating teacher context. As mentioned in the preceding section, for use in this project, twenty-four of the thirty-eight items on the TEI were modified and grouped into the four dimensions logically related to outcomes anticipated in the Professional Development Schools collaborative at MSU: Mentoring Self-Efficacy, Professional Knowledge, Teaching Self-Efficacy, and Collegiality. A list of items on each scale is reported along with scale reliability analyses in Appendix A.

All items are phrases that complete the stem: "As a result of my school's participation in the Professional Development Schools program, I . . ." Each item solicits responses on a five-point Likert-type scale, within which 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. An additional item solicits perceptions of the influence teachers have had in decision making in their schools. Demographic items solicit information regarding respondents' sex, ethnic group, educational attainment, years of teaching experience, years in their present school, and cooperating teacher status.

Administration

The questionnaire was administered in the six schools which were participating in the PDS program. University liaisons were responsible for administration of the questionnaire. Questionnaires were administered during a weekly staff meeting at each site; the liaisons returned completed questionnaires to the principal investigator. Response rates at the various sites varied widely. Frequencies and rates of response by school were Universe Elementary ($n = 20$; 67%); Lantern Elementary ($n = 22$; 63%); Friar Tuck School ($n = 32$; 91%); Boysen Elementary ($n = 25$; 93%); Pyramid School ($n = 24$; 57%); Lakeview Elementary ($n = 15$; 51%).

Analyses

Frequencies were calculated for each demographic item in order to generate a description of the subjects participating in the study. Descriptive statistics were computed for each item, and inter-item effect sizes were

computed to compare item means. Percentage agreement was computed by assigning "agree" to all responses that were either "agree" or "strongly agree," and by assigning "disagree" to all other responses.

For each of the four dimensions, reliability analyses and *t*-tests or analyses of variance (ANOVAs) were conducted utilizing school membership and demographic variables as independent variables. One-way ANOVAs were used to determine univariate school and demographic effects, and two-way ANOVAs were computed to determine whether there were any interaction effects between school and teacher race, educational attainment, or sex. When omnibus *F*-tests resulted in rejection of no difference or no interaction hypotheses, post hoc multiple comparisons were effected through use of Scheffe's procedure.

Results

Subject demographics

The number of subjects at each school ranged from 15 to 32; the median number of subjects was 25.5. The total number of subjects was 140. Of these, 124 (89%) were female, and 49 (36%) were African-American. Most teachers (66%) had attained a Master's degree or higher. About 57% had served as cooperating teachers during the year, and 59% had served as cooperating teachers in previous years. Many of the teachers were highly experienced; 97% of the teachers included in the sample had 11 or more years of teaching experience. Approximately 31% ($n = 43$) had 11 or more years of experience at their present school, whereas 44% ($n = 61$) had four to ten years, and 25% ($n =$

34) had fewer than four years of experience in their present school.

Item effect sizes

Effect sizes (ES) for each item were computed by subtracting the grand mean for all items from each individual item mean; this difference was divided by the mean square error derived from a repeated measures analysis of variance. Thus, the effect size for each item represents the difference between the item mean and the grand mean standardized by the residual variation in items after accounting for subject and item variance.

There are no absolute criteria for interpretation of effect sizes. For the purpose of this report, absolute values of effect sizes lower than .25 were not considered to be meaningful; those between .25 and .40 were considered to be small but perhaps meaningful; effect sizes between .41 and .70 were considered to be moderate in strength; and effect sizes above .70 were considered to be large. Several items had moderate positive effect sizes; each is reported below in rank order of strength.

According to the data, teachers in the Professional Development Schools felt that their participation in the program most enhanced (a) their sensitivity to the problems and stress experienced by practice teachers (Q14; ES = .31; % agree = 77%), (b) their self-perception of the influence they can have in improving teaching and learning (Q6; ES = .31; % agree = 76%), (c) their willingness to share and work with peers to improve teaching and learning at their schools (Q16; ES = .31; % agree = 75%), and (d) their confidence as professional role models (Q17; ES = .29; % agree = 74%).

TABLE 1

Empowerment Questionnaire Item Statistics

Item	Response Frequencies						
	SD	D	N	A	SA	% agree	n
<i>Stem: As a result of my school's participation in the PDS program, I . . .</i>							
1. am a better role model for practice teachers.	4	9	32	74	21	68	140
2. talk more with other teachers.	3	16	32	72	16	63	139
3. am better able to assist practice teachers.	5	11	32	65	27	66	140
4. have increased interest in helping practice teachers.	8	11	26	66	29	68	140
5. have more confidence in my ability to supervise and evaluate practice teachers.	6	12	29	66	27	66	140
6. am more aware of the influence I can have in improving teaching and learning.	7	8	19	71	35	76	140
7. am more knowledgeable about good and poor teaching practices.	3	13	24	78	22	71	140
8. am more confident about my ability to help or teach students who are at risk for school failure.	6	16	39	57	21	56	139
9. have more influence in contributing to the success of others.	5	8	35	74	18	66	140

TABLE 1, cont.

Empowerment Questionnaire Item Statistics

Item	Response Frequencies						
	SD	D	N	A	SA	% agree	n
<i>Stem: As a result of my school's participation in the PDS program, I . . .</i>							
10. am more willing to assist other teachers who may be experiencing problems.	4	17	19	78	22	71	140
11. am more confident about my ability to work as an equal partner with university personnel in preparing new teachers.	5	12	24	75	24	71	140
12. have increased my sense of professionalism.	9	7	29	69	26	68	140
13. have new insights into personality factors and their influences on teaching.	5	16	26	71	19	66	137
14. am more sensitive to the problems and stress experienced by practice teachers.	7	11	14	77	31	77	140
15. participate in more cooperative planning with other teachers.	3	21	27	72	17	64	140
16. am more willing to share and work with peers to improve teaching and learning at my school.	5	14	15	72	32	75	138
17. have increased confidence as a professional role model.	5	12	19	73	30	74	139

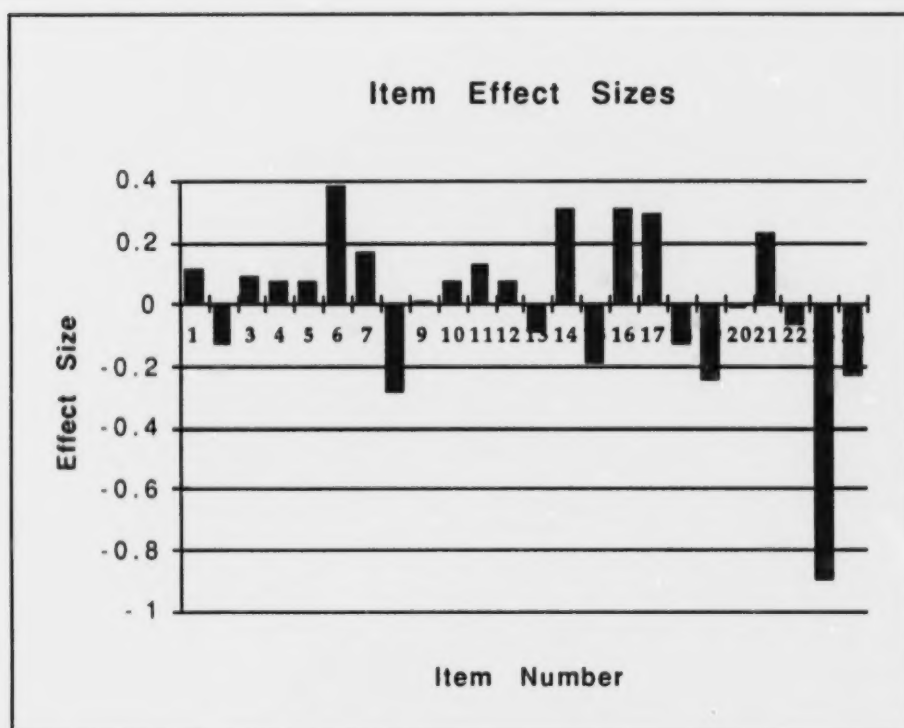
TABLE 1, cont.

Empowerment Questionnaire Item Statistics

Item	Response Frequencies						
	SD	D	N	A	SA	% agree	n
<i>Stem: As a result of my school's participation in the PDS program, I...</i>							
18. can better coach others in skill development.	3	13	37	70	15	62	138
19. have clarified my own beliefs about teaching.	5	18	35	60	21	58	139
20. have used more cooperative problem-solving strategies.	3	10	37	72	17	64	139
21. am more aware of individual styles of teaching.	6	12	18	75	28	74	139
22. recognize the need to improve my skills in working with practice teachers.	4	12	38	62	22	61	138
23. have participated more in school-wide decision making.	10	22	45	49	12	44	139
24. clearly understand the role played by university representatives in assisting practice teachers.	7	13	32	70	16	62	138

Several items had strong or moderate negative effect sizes. Compared to responses on other items, teachers were less likely to report that they had participated more in school-wide decision making (Q23; ES = -.90; % agree =

FIGURE 1. *Teacher Empowerment Questionnaire: Item Effect Sizes*



44%), were more confident about their ability to help or teach students who are at risk for school failure (Q8; ES = -.29; % agree = 56%), or had clarified their own beliefs about teaching (Q19; ES = -.25; % agree = 58%).

Between-school differences

A one-way analysis of variance revealed statistically significant between-schools differences in scores on the Mentoring Self-Efficacy dimension [$F(5,134) = 2.80, p = .019$], but follow-up tests did not reveal a significant difference between any two schools. Marginally significant (i.e., $.050 < p < .075$) differences were observed between schools on the other scales.

Demographic differences

The only demographic variable associated with differences in scale mean scores was minority status. African-American teachers had significantly higher scores than non-minority teachers on every scale (see Table 2). This finding supports those of Butler, Etheridge, James, and Ellis (1989), who also found differences between minority and non-minority teachers in their self-perceptions of empowerment: "Consistently high ratings of empowerment outcomes were reported by black mentors."

TABLE 2

Empowerment Scale Means by Race

Scale	Group	Mean	SD	n	t
Mentoring Self-Efficacy	Minority	31.07	5.49	54	2.25*
	Non-minority	28.43	7.40	83	
Teaching Self-Efficacy	Minority	22.98	4.32	54	2.66**
	Non-minority	20.76	5.06	83	
Professional Knowledge	Minority	19.93	3.49	54	2.69**
	Non-minority	17.88	4.83	83	
Collegiality	Minority	15.50	2.93	54	2.63**
	Non-minority	14.00	3.46	83	

* $p < .05$.

** $p < .01$.

Summary and Conclusions

Data analyses indicate that teachers in the Professional Development Schools felt that their participation in the program enhanced their empowerment along the dimensions of mentoring self-efficacy, teaching self-efficacy, collegiality, and professional knowledge. This enhanced empowerment may be traced to the three major components of the MSU Professional Development Schools model.

Supervision of practice teachers was a program component that may have contributed to the teachers' enhanced empowerment along the mentoring self-efficacy dimension. Cooperating teachers, who supervised undergraduate or graduate M.A.T. (Masters of Arts in Teaching) students in early childhood or elementary education licensure programs, attended workshops on supervision and evaluation of practice teachers. They also took the lead role in the evaluation process during progress report meetings with the practice teacher and university liaison.

Teachers indicated that they had been empowered along the teaching self-efficacy dimension. Their enhancement of sense of status, self-esteem, and professionalism may have been influenced by the school improvement planning and clinical professor training components of the program.

The clinical professor training was the program component designed to affect teacher empowerment along the professional knowledge dimension. As a result of enhancement along this dimension, teachers believed that they

had improved subject matter and pedagogical skills.

Perceived enhancement along the collegiality dimension was most likely influenced by the school improvement planning component of the PDS program. Through the process of developing a comprehensive program for their school, teachers experienced many opportunities to share their opinions and ideas regarding goals, objectives, and activities required to ensure that their schools were learning communities for children, teachers, parents, and administrators. Teachers shared their ideas in written and oral forms with their peers at their specific grade level, across grade levels, and with support teachers and administrators.

Teachers rated the degree to which they experienced enhanced decision making as a result of the program much lower than they rated other program-induced changes. This perception may be related to at least two factors. First, while school faculties voted to participate in the PDS program, many of the decisions regarding how the program would be implemented during the pilot year were made without input from the teachers, i.e., number of hours for clinical professor training and the model used for the school improvement planning process. Teachers probably did not begin to feel the impact of these decisions until the implementation phase of the program. Secondly, because of state and local school board mandated guidelines, teachers believed that their hands were often tied in making desired curriculum changes as they worked on their school improvement plans. Again, it was their perception that they had little power to make changes that they felt could improve

teaching and learning in their schools.

There were no significant differences observed between schools along the empowerment dimensions during this pilot year. This finding may be related to at least three program factors. First, the program at each PDS was organized and implemented around the same three program components noted earlier. Secondly, all teachers who wished to earn the clinical professor training certificate were required to complete the same number of contact hours of training. And thirdly, there were many topics and experiences included in workshop sessions that were common among the six schools. As individual schools implement their school improvement plans in future years, it is more likely that differences in empowerment will be observed between schools.

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APPENDIX A

Scale Items and Reliability Estimates

The Mentoring Self-Efficacy scale consisted of the following seven items:

1. am a better role model for practice teachers.
3. am better able to assist practice teachers.
4. have increased interest in helping practice teachers.
5. have more confidence in my ability to supervise and evaluate practice teachers.
14. am more sensitive to the problems and stress experienced by practice teachers.
18. can better coach others in skill development.
22. recognize the need to improve my skills in working with practice teachers.

Coefficient alpha for the Mentoring Self-Efficacy scale was .95 ($n = 137$).

The Teaching Self-Efficacy scale consisted of the following five items:

6. am more aware of the influence I can have in improving teaching and learning.
9. have more influence in contributing to the success of others.
11. am more confident about my ability to work as an equal partner with university personnel in preparing new teachers.
12. have increased my sense of professionalism.
17. have increased confidence as a professional role model.

Internal consistency reliability for this scale was .94 ($n = 139$)

The Professional Knowledge scale consisted of six items:

7. am more knowledgeable about good and poor teaching practices.
8. am more confident about my ability to help or teach students who are at risk for school failure.
13. have new insights into personality factors and their influences on teaching.
19. have clarified my own beliefs about teaching.
20. have used more cooperative problem-solving strategies.
21. am more aware of individual styles of teaching.

Internal consistency reliability for this scale was .90 ($n = 135$).

The Collegiality scale consisted of four items:

2. talk more with other teachers.
10. am more willing to assist other teachers who may be experiencing problems.
15. participate in more cooperative planning with other teachers.
16. am more willing to share and work with peers to improve teaching and learning at my school.

Internal consistency reliability was .89 ($n = 137$).

Caveats

The scales exhibited high internal consistency reliability, but they may not reflect the empirical dimensionality of the set of items (i.e., the items could have been grouped together differently and may have yielded similarly high reliability estimates). Note that two of the items on the questionnaire were not included on any of the scales. Originally item 23 was included on the Teaching Self-Efficacy scale but was later deleted because it had a low item-total correlation that reduced the overall internal consistency of the scale. Item 24 was judged to have low face validity, and was excluded a priori.